## **WEST Search History**

9/957450 AH#8

DATE: Monday, March 03, 2003

Set Name side by side	Query	Hit Count	Set Name result set
DB = USH	PT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ		
L9	11 with L8	2	L9
L8	sox6 or sox5	10	L8
L7	11 with L6	10	L7
L6	sox9	22	L6
L5	13 and 14	852	L5
L4	transfect\$ or transduc\$ or transform\$ or infect\$	987043	L4
L3	11 with L2	1016	L3
L2	differentiat\$	166940	L2
L1	chondro\$	9525	· L1

END OF SEARCH HISTORY

## **WEST Search History**

DATE: Wednesday, April 02, 2003

Set Name side by side

Query

**Hit Count Set Name** 

result set

DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ

L1

col2a1!

65 L1

END OF SEARCH HISTORY

=> s col2a1 1267 COL2A1 => s enhancer? 102416 ENHANCER? => 11 and 12 LI IS NOT A RECOGNIZED COMMAND The previous command name entered was not recognized by the system. For a list of commands available to you in the current file, enter "HELP COMMANDS" at an arrow prompt (=>). => s 11 and 12 L3 125 L1 AND L2 => dup rem 13 PROCESSING COMPLETED FOR L3 42 DUP REM L3 (83 DUPLICATES REMOVED) => s 14 and py<2000 1 FILES SEARCHED... 3 FILES SEARCHED ... 4 FILES SEARCHED... 22 L4 AND PY<2000 L5 => d 15 ibib abs 1-22 L5 ANSWER I OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. ACCESSION NUMBER: 1999:527438 BIOSIS DOCUMENT NUMBER: PREVI99900527438 TITLE: Changes in chondrocyte-specific gene expression patterns during loss of the chondrocyte-specific phenotype and its subsequent recovery. AUTHOR(S): Stokes, D. G. (1); Liu, G. (1); Dharmavaram, R. (1); Jimenez, S. A. (1) CORPORATE SOURCE: (1) Philadelphia, PA USA SOURCE: Arthritis & Rheumatism, ( \*\*\*Sept., 1999\*\*\* ) Vol. 42, No. 9 SUPPL., pp. S201. Meeting Info.: 63rd Annual Scientific Meeting of the American College of Rheumatology and the 34th Annual Scientific Meeting of the Association of Rheumatology Health Professionals Boston, Massachusetts, USA November 13-17, 1999 ISSN: 0004-3591. DOCUMENT TYPE: Conference LANGUAGE: English L5 ANSWER 2 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. ACCESSION NUMBER: 1999:311153 BIOSIS DOCUMENT NUMBER: PREV199900311153 TITLE: SV40 large T antigen expression driven by \*\*\*col2a1\*\*\* regulatory sequences immortalizes articular chondrocytes but does not allow stabilization of type II collagen AUTHOR(S): Steimberg, Nathalie; Viengchareun, Say; Biehlmann, Florence; Guenal, Isabelle; Mignotte, Bernard; Adolphe, Monique; Thenet, Sophie (I) CORPORATE SOURCE: (1) Laboratoire de Pharmacologie Cellulaire, Centre de Recherches Biomedicales des Cordeliers, Ecole Pratique des Hautes Etudes, 15 rue de l'Ecole de Medecine, 75006, Paris SOURCE: Experimental Cell Research, ( \*\*\*June 15, 1999\*\*\* ) Vol. 249, No. 2, pp. 248-259. ISSN: 0014-4827. DOCUMENT TYPE: Article LANGUAGE: English SUMMARY LANGUAGE: English AB Immortalization of chondrocytes by SV40 T Ag has often been reported trigger the loss of expression of type II collagen, one of the main differentiation markers, although some immortalized chondrocyte lines maintaining a differentiated phenotype have also been described. Here, we

show using transient cotransfections in differentiated chondrocytes that,

in contrast to c-src, neither SV40 T Ag, nor c-myc, decreases \*\*\*col2aI\*\*\* transcriptional activity. Then, we report the possibility of immortalizing rabbit articular chondrocytes by expression of SV40 T controlled by the \*\*\*col2aI\*\*\* promoter and \*\*\*enhancer\*\*\* (pCol2SV). This strategy allows one to select within a population of differentiated chondrocytes those which are able to maintain functional regulation of the \*\*\*col2a1\*\*\* gene through long-term culture. In precrisis pCol2SV-transfected chondrocytes, all-trans-retinoic acid, a down-regulator of \*\*\*col2a1\*\*\* expression, induced apoptosis, suggesting the strict control of T Ag expression by \*\*\*col2aI \*\*\* regulatory sequences. Some pCol2SV-transfected chondrocytes were definitively immortalized, after a short crisis period. However, type II collagen synthesis was restricted to a small proportion of cells, which went on to decrease with subculture, while the proportion of cells expressing T Ag was not affected. In these postcrisis cells, T Ag remained at least partially under the control of functional \*\*\*col2a1\*\*\* regulatory elements as assessed by all-trans-retinoic acid down-regulation. L5 ANSWER 3 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. ACCESSION NUMBER: 1999:180561 BIOSIS DOCUMENT NUMBER: PREVI99900180561 TITLE: Chondrocyte-specific \*\*\*enhancer\*\*\* elements in the Coll Ia2 and \*\*\*Col2a1\*\*\* genes share common characteristics. AUTHOR(S): Bridgewater, L. C.; De Crombrugghe, B. CORPORATE SOURCE: Univ. Tex. M. D. Anderson Cancer Cent., Houston, TX 77030 USA SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, ( \*\*\*March, 1999\*\*\* ) Vol. 40, pp. 367-368. Meeting Info.: 90th Annual Meeting of the American Association for Cancer Research Philadelphia, Pennsylvania, USA April 10-14, 1999 American Association for Cancer Research . ISSN: 0197-016X. DOCUMENT TYPE: Conference LANGUAGE: English L5 ANSWER 4 OF 22 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. ACCESSION NUMBER: 1999:73907 BIOSIS DOCUMENT NUMBER: PREV199900073907 TITLE: Mechanism of regulatory target selection by the SOX high-mobility-group domain proteins as revealed by comparison of SOX1/2/3 and SOX9. AUTHOR(S): Kamachi, Yusuke; Cheah, Kathryn S. E.; Kondoh, Hisato (1) CORPORATE SOURCE: (1) Inst. Molecular Cellular Biol., Osaka Univ., Yamadaoka 1-3, Suitashi, Osaka 565-0871 Japan SOURCE: Molecular and Cellular Biology, ( \*\*\*Jan., 1999\*\*\* ) Vol. 19, No. 1, pp. 107-120. ISSN: 0270-7306. DOCUMENT TYPE: Article LANGUAGE: English AB SOX proteins bind similar DNA motifs through their high-mobility-group (HMG) domains, but their action is highly specific with respect to target genes and cell type. We investigated the mechanism of target selection by comparing SOX1/2/3, which activate delta-crystallin minimal \*\*\*enhancer\*\*\* DC5, with SOX9, which activates \*\*\*Col2aI\*\*\* minimal \*\*\*enhancer\*\*\* COL2C2. These \*\*\*enhancers\*\*\* depend on both the SOX binding site and the binding site of a putative partner factor. The DC5 site was equally bound and bent by the HMG domains of SOX1/2 and

activation domains of these SOX proteins mapped at the distal portions of

the C-terminal domains were not cell specific and were independent of the

partner factor. Chimeric proteins produced between SOX1 and SOX9

showed



from CPC cellulose columns, and hexosamine content. During the initial period of overt cardiac muscle \*\*\*differentiation\*\*\* (approximately stage 10) \*\*\*chondroitin\*\*\* sulfates are not \*\*\*detectable\*\*\* but an undersulfated component is present. Chondroitin sulfate synthesis appears shortly after overt muscle differentiation. Hyaluronate is present both during and after overt myocardial differentiation. Although epimerization of 3H glucosamine derived labeled UPD N acetyl D glucosamine

occurs (determined by recovery of incorporated labeled galactosamine), label does not appear in chondroitin sulfate. 3H Glucosamine is thus a relatively specific precursor for unsulfated glycosaminoglycans, a fact that was exploited in demonstrating their distribution radioautographically. Glycosaminoglycan synthesis was also examined in hearts labeled in isolated organ culture and in situ but exposed directly to the medium by removal of the splanchnopleure. In both cases fully sulfated chondroitin sulfate and chondroitin are not synthesized. Hearts make only hyaluronate and undersulfated chondroitin sulfate.

L19 ANSWER 57 OF 57 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 1965:465046 HCAPLUS

DOCUMENT NUMBER: 63:65046

ORIGINAL REFERENCE NO.: 63:11989c-d

Histochemical studies on acid mucopolysaccharides. I. On some new methods and differentiation in tissue

· sections

AUTHOR(S): Sugiyama, Taketoshi CORPORATE SOURCE: Univ. Kyoto, Japan

SOURCE: Acta Pathol. Japon. (1964), 14(4), 413-31;433

DOCUMENT TYPE: Journal LANGUAGE: English

AB A cationic resin-azo dye method was developed for use with all mucopolysaccharides. A Neutral Red method differentiated sulfated and nonsulfated acid mucopolysaccharides. Keratosulfate, which was not stained, and \*\*\*chondroitin\*\*\* sulfate B, which stained, were \*\*\*differentiated\*\*\* by a \*\*\*testicular\*\*\*

hyaluronidase-methylation-

saponification method. The Molisch reaction was used to identify keratosulfate, contg. galactose, and sialomucin, contg. neuraminic acid, histochem.

=> s sox9 or sox5 or sox6

L.20 1216 SOX9 OR SOX5 OR SOX6

=> s 11 and 120

397 L1 AND L20 L21

=> dup rem 121 PROCESSING COMPLETED FOR L21

148 DUP REM L21 (249 DUPLICATES REMOVED)

=> s 122 and 16

58 L22 AND L6 L23

=> s 122 and py<2001

1 FILES SEARCHED... 3 FILES SEARCHED...

4 FILES SEARCHED...

71 L22 AND PY<2001

=> dup rem 124

PROCESSING COMPLETED FOR L24

71 DUP REM L24 (0 DUPLICATES REMOVED)

=> d 125 ibib abs 1-71

DOCUMENT NUMBER:

L25 ANSWER I OF 71 HCAPLUS COPYRIGHT 2003 ACS ACCESSION NUMBER: 2001:742073 HCAPLUS

TITLE:

Regulations of \*\*\*sox9\*\*\* activity during

\*\*\*chondrogenesis\*\*\* AUTHOR(S): Huang, Wendong

CORPORATE SOURCE: Health Science Center, Univ. of Texas,

136:178839

Houston, TX,

SOURCE: ( \*\*\*2000\*\*\* ) 122 pp. Avail.: UMI, Order No.

DA9994539

From: Diss. Abstr. Int., B 2001, 61(11), 5715

DOCUMENT TYPE: Dissertation LANGUAGE: English

AB Unavailable

L25 ANSWER 2 OF 71 BIOSIS COPYRIGHT 2003 BIOLOGICAL

ABSTRACTS INC.

ACCESSION NUMBER: 2000:339946 BIOSIS DOCUMENT NUMBER: PREV200000339946

TITLE: Identification of an enhancer sequence within the first intron required for cartilage-specific transcription of the alpha2(X1) collagen gene.

AUTHOR(S): Liu, Ying; Li, Haochuan; Tanaka, Kazuhiro; Tsumaki, Noriyuki; Yamada, Yoshihiko (1)

CORPORATE SOURCE: (1) CDBRB, NIDCR, NIH, Bldg. 30, Rm. 405, Bethesda, MD,

20892 USA

SOURCE: Journal of Biological Chemistry, ( \*\*\*April 28, 2000\*\*\* )

Vol. 275, No. 17, pp. 12712-12718. print.

ISSN: 0021-9258. DOCUMENT TYPE: Article LANGUAGE: English

SUMMARY LANGUAGE: English

AB Type XI collagen, a heterotrimer composed of alpha1(XI), alpha2(XI)

alpha3(XI), is primarily synthesized by \*\*\*chondrocytes\*\*\* in cartilage and is also present in some other tissues. Type XI collagen plays a critical role in collagen fibril formation and skeletal morphogenesis. We investigated a tissue-specific transcriptional enhancer in the first intron of the alpha2(XI) collagen gene (Col11a2). Transient transfection assays using reporter gene constructs revealed that a 60-base pair (bp) segment within intron 1 increased promoter activity of Coll1a2 in rat \*\*\*chondrosarcoma\*\*\* cells but not in either BalB/3T3 cells or undifferentiated ATDC5 cells, suggesting that it contained cell type-specific enhancer activity. In transgenic mice, this 60-bp fragment was also able to target beta-galactosidase expression to cartilage including the limbs and axial skeleton, with similar localization specificity as the full-length intron 1 fragment. Competition experiments in gel shift assays using mutated oligonucleotides showed that recombinant

\*\*\*Sox9\*\*\* bound to a 7-bp sequence, CT-CAAAG, within the 60-bp segment.

Anti- \*\*\*Sox9\*\*\* antibodies supershifted the complex of the 60-bp segment with recombinant \*\*\*Sox9\*\*\* or with rat \*\*\*chondrosarcoma\*\*\*

cell extracts, confirming the binding of \*\*\*Sox9\*\*\* to the enhancer. Moreover, a site-specific mutation within the 7-bp segment resulted in essentially complete loss of the enhancer activity in

\*\*\*chondrosarcoma\*\*\* cells and transgenic mice. These results suggest that the 7-bp sequence within intron 1 plays a critical role in the cartilage-specific enhancer activity of Col11a2 through \*\*\*Sox9\*\*\* -mediated transcriptional activation.

L25 ANSWER 3 OF 71 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

ACCESSION NUMBER: 2000:452411 BIOSIS DOCUMENT NUMBER: PREV200000452411

\*\*\*SOX9\*\*\* enhances aggrecan gene promoter/enhancer TITLE:

activity and is up-regulated by retinoic acid in a cartilage-derived cell line, TC6.

AUTHOR(S): Sekiya, Ichiro; Tsuji, Kunikazu; Koopman, Peter; Watanabe,

> Hideto; Yamada, Yoshihiko; Shinomiya, Kenichi; Nifuji, Akira; Noda, Masaki (1)

CORPORATE SOURCE: (1) Dept. of Molecular Pharmacology, Medical Research

Inst., Tokyo Medical and Dental University, 2-3-10 Kanda-Surugadai, Chiyoda-ku, Tokyo, 101-0062 Japan

SOURCE: Journal of Biological Chemistry, ( \*\*\*April 14, 2000\*\*\* ) Vol. 275, No. 15, pp. 10738-10744, print. ISSN: 0021-9258.

DOCUMENT TYPE: Article LANGUAGE: English SUMMARY LANGUAGE: English

AB \*\*\*SOX9\*\*\* is a transcription factor that plays a key role in \*\*\*chondrogenesis\*\*\* . Aggrecan is one of the major structural